BETTER VALUE

For each of the following questions, demonstrate all your working.

1) A cinema offers two ticket types:

Standard: £7 per ticket

Family bundle: 4 tickets for £25

Which option is the better value per person?

 $25 \div 4 = £6.25$

The family bundle is the better value

2) A shop sells pencils:

1 pencil for 60p

Pack of 5 pencils for £2.50

Which option is the better deal?

 $2.50 \div 5 = £0.50$

The pack of 5 is the better deal

3) A fairground offers the following ride packages:

£6 for 2 rides

£10 for 4 rides

Which option gives the better value per ride?

$$6 \div 2 = £3$$

 $10 \div 4 = £2.50$

£10 for 4 rides

4) A phone plan offers 6 GB for £10.75, or 10 GB for £18. Which plan gives the better value per GB?

$$10.75 \div 6 = £1.7916 \dots per GB$$

$$18 \div 10 = £1.80 \ per \ GB$$

The 6 GB plan is the better value

5) A bottle of water costs £1.20 for 1.5 litres. Another bottle costs £0.79 for 1 litre. Which is the better value?

 $1.20 \div 1.5 = £0.80 per litre$

The 1 litre bottle is the better value

6) A 500 g pack of pasta costs £0.80. A 1 kg pack costs £1.60. Which is the better value?

$$500 g = 0.5 kg$$

 $0.80 \div 0.5 = £1.60$

Neither, they both cost the same

7) Two packs of kitchen roll are on sale in a supermarket.

Pack of 4 for £1.40

Pack of 10 for £3.60

Which pack offers the better value for the money?

$$1.40 \div 4 = £0.35$$

$$3.60 \div 10 = £0.36$$

The pack of 4 is the better value

8) A pack of 6 cans of fizzy drink costs £2.70. A pack of 12 cans of fizzy drink costs £5.00. Which pack offers the better value per can?

$$2.70 \div 6 = £0.45$$

 $5 \div 12 = 0.416 \dots = £0.42$

The pack of 12 is the better value per can

9) A travel bottle of shampoo contains 150 ml and costs £1.80. A family-size bottle contains 600 ml and costs £5.40.
Which size is the better value?

$$1.80 \times 4 = £7.20$$
 for 600 m l

The family-size is the better value

10) A 2 litre bottle of juice is £1.80.
A 750 ml bottle of juice is £0.75.
Which size is the better value?

$$2 \ litres = 2000 \ ml$$
$$1.80 \div 20 = £0.09 \ per \ 100 \ ml$$
$$0.75 \div 7.5 = £0.10 \ per \ 100 \ ml$$

The 2 litre bottle is the better value

11) A shop has two offers on pens:

Offer 1: Buy 2 for £1.28
Offer 2: £0.95 each
Buy 2 get 1 free

Which offer is the better value per pen?

$$1.28 \div 2 = £0.64 \ per \ pen$$
 $0.95 \times 2 = £1.90$
 $1.90 \div 3 = £0.63 \ per \ pen \ (2 \ dp)$

Offer 2 is the better value per pen

12) A shop sells chewing gum in three different pack sizes:

Pack A: 6 pieces for £1.20 Pack B: 10 pieces for £1.70 Pack C: 18 pieces for £3.24

Which pack offers the best value?

Pack
$$A = 1.20 \div 6 = £0.20$$
 per piece

Pack $B = 1.70 \div 10 = £0.17$ per piece

Pack $C = 3.24 \div 18 = £0.18$ per piece

Pack B is the best value

13) A phone company offers two internet plans.

Plan A: £27 per month for 100 GB Plan B: £35 per month for unlimited data

How much would you have to use in GB for Plan B to be the better value?

27 ÷ 100 = £0.27 per GB
£35 per month

$$35 \div x = 0.27$$

 $35 = 0.27x$
 $x = \frac{35}{0.27} = 129.629 ...$
130 GB

14) A hotel charges £80 per night, or a special offer rate of £210 for 3 nights (with a free breakfast worth £10 per day included).

Is the special offer better than paying per night with breakfast separately? If so, how much is saved through the special offer?

Per night with breakfast:

$$80 \times 3 = £240$$

 $10 \times 3 = £30$
 $240 + 30 = £270$

Yes, it is a better offer with a savings of £60

270 - 210 = £60